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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,794	03/18/2004	Satoshi Miyaji	042141	4593

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EXAMINER	
YUEN, KAN	

ART UNIT	PAPER NUMBER
2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/802,794	MIYAJI ET AL.	
	Examiner	Art Unit	
	Kan Yuen	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3 and 6-8* is/are rejected.

7)☒ Claim(s) *2,4 and 5* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *5/6/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Detailed Action

Claim Rejections - 35 USC § 103

1. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ghanwani et al. (Pat No.: 6400686), in view of Cheung et al. (Pub No.: 2005/0180415).

For claim 1, 3, Ghanwani et al. disclosed the method of sending media packet from a sender side apparatus to a receiver side apparatus, and sending and receiving a sender report packet and a receiver report packet between the sender side apparatus and the receiver side apparatus (see column 2, lines 30-49, and see fig. 1). As shown in fig. 1, the traffic source 14 transmits media packet through the packet switch network to the traffic destination 20; the sender side apparatus comprises a transmission bit rate estimation means for estimating transmission bit rate on the basis of round-trip delay time for a sender report packet and a receiver report packet each having a small size and round-trip delay time for a sender report packet and a receiver report packet each having a large size (see column 1, lines 45-67, and see column 2, lines 1-12, and see fig. 3). The estimation of transmission data rate is adjusted based on the congestion control information or the report returned from the destination. Thus, the source and destination form a control loop based on the round-trip time. Further, the source and destination points both can adjust the congestion control information based on the received measured information. However, Ghanwani et al. did not disclose the method of wherein each of the sender report packet and the receiver report packet comprises report packets of two kinds differing in size. Cheung et al. from the same or similar fields of endeavor teaches the method of wherein each of the sender report packet and the receiver report packet comprises report packets of two kinds differing in size (see paragraph 0095, lines 1-5, paragraph 0096, lines 1-10, and paragraph 0097, lines 1-6). The system comprises two types of feedbacks. First is the Net-feeds or the larger feedback, which contains statistical information such as packet loss rate in amid-range

time frame and the average and variance of round-trip time. Secondly, the SP-feed is just a control feedback, which contains less information. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Cheung et al. in the network of Ghanwani et al. The motivation for using the method as taught by Cheung et al. in the network of Ghanwani et al. being that it improves the communication system complexity.

Regarding to claim 3, Cheung et al. also disclosed the method of the sender report packet and the receiver report packet each having the large size are obtained by adding dummy data to the sender report packet and the receiver report packet each having the small size, respectively (see paragraph 0095, lines 1-5, paragraph 0096, lines 1-10, and paragraph 0097, lines 1-6). The Net-feed feedback is added with statistical data such as status of the originating source, and therefore we can interpret the statistical data as the dummy data.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ghanwani et al. (Pat No.: 6400686), in view of Cheung et al. (Pub No.: 2005/0180415), as applied to claim 3 above, and further in view of Nygard et al. (Pat No.: 6044082).

For claim 6, Ghanwani et al. and Cheung et al. disclosed all the subject matter of the claimed invention with the exception of the dummy data has been subjected to compression processing. Nygard et al. from the same or similar fields of endeavor teaches the method of the dummy data has been subjected to compression processing

(see column 1, lines 60-67). The compressed speech signal is switched by adding dummy bits or data to the compressed signal. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Nygard et al. in the network of Ghanwani et al. and Cheung et al. The motivation for using the method as taught by Nygard et al. in the network of Ghanwani et al. and Cheung et al. being that it improves the communication system complexity.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ghanwani et al. (Pat No.: 6400686), in view of Cheung et al. (Pub No.: 2005/0180415), as applied to claim 1 above, and further in view of Gardner et al. (Pat No. 6327275).

For claim 7, Ghanwani et al. and Cheung et al. disclosed all the subject matter of the claimed invention with the exception of transmission bit rate estimated by the transmission bit rate estimation means is reflected into encoding for media. Gardner et al. from the same or similar fields of endeavor teaches the method of transmission bit rate estimated by the transmission bit rate estimation means is reflected into encoding for media (see column 1, lines 58-67). The encoder manipulates the transmission rate to control the overflow and underflow of a buffer. Therefore, we can interpret the encoding rate controls or reflects the transmission rate. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Gardner et al. in the network of Ghanwani et al. and Cheung et al. The motivation for using the method as taught by Gardner et al. in the network of Ghanwani et al. and Cheung et al. being that it balances the buffers in the system.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ghanwani et al. (Pat No.: 6400686), in view of Cheung et al. (Pub No.: 2005/0180415), and Gardner et al. (Pat No. 6327275), as applied to claim 7 above, and further in view of Krishnamachari et al. (Pub No.: 2003/0072376).

For claim 8, Ghanwani et al., Cheung et al. and Gardner et al. all disclosed the subject matter of the invention with the exception of reflecting the transmission rate on a network estimated by the transmission bit rate estimation means into encoding for media, rate control is conducted according to priority of subject media. Krishnamachari et al. from the same or similar fields of endeavor teaches the method of reflecting the transmission rate on a network estimated by the transmission bit rate estimation means into encoding for media, rate control is conducted according to priority of subject media (see paragraph 0024, lines 1-30). The prioritized packets are assigned to different modulation technique based on the priority of the packets. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Krishnamachari et al. in the network of Ghanwani et al. Cheung et al. and Gardner et al. The motivation for using the method as taught by Krishnamachari et al. in the network of Ghanwani et al. Cheung et al. and Gardner et al. being that it increases the capacity of buffers in the system.

Allowable Subject Matter

8. Claims 2,4 and 5 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art failed to teach the method of the transmission bit rate estimation means estimates transmission bit rate by using dual linear simultaneous equations composed of an equation for finding round-trip delay time for the sender report packet and the receiver report packet each having the small size and an equation for finding round-trip delay time for the sender report packet and the receiver report packet each having the large size, as recited in claim 2. The sender side apparatus sends a set of packets combined in the order of a sender report packet having a small size, a sender report packet having a large size, and media packets, as recited in claim 4.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Delaney et al. (Pat No.: 7054422), Tzannes et al. (Pub No.: 2003/0007509), and Tourunen et al. (Pub No.: 2002/0097723), are show systems which considered pertinent to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kan Yuen whose telephone number is 571-270-2413. The examiner can normally be reached on Monday-Friday 10:00a.m-3:00p.m EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky O. Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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RICKY Q. NGO
SUPERVISORY PATENT EXAMINER